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In the Office Action mailed March 9, 2005, all of the pending claims, that is claims 1-20, were rejected. With regard to the art of record, Claims 1 and 3-4 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Tokumaru *et al.* ('327) reference. Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tokumaru *et al.* ('327) reference. Claims 2 and 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tokumaru *et al.* ('327) reference in view of the Hornchek *et al.* ('991) reference. Claims 9-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hornchek *et al.* ('991) reference in view of the Tokumaru *et al.* ('327) reference. For the following reasons, it is respectfully submitted that the present application is now in condition for allowance.

Rejection of Claims 1 and 3-4 under 35 U.S.C. § 102(b) over Tokumaru *et al.* ('327)

Claims 1 and 3-4 are rejected under 35 U.S.C. § 102(b) as being anticipated by the Tokumaru *et al.* ('327) reference. Applicants respectfully traverse this rejection.

The present invention, as defined in independent claim 1, is directed to an electrostatic dissipative alignment plate which includes a base and a frame. It is a feature of the invention that the frame comprises a conducting material.

The Examiner states that the Tokumaru *et al.* ('327) reference discloses an electrostatic dissipative alignment plate having the features of the present invention. Specifically, the Examiner identifies column 4, lines 40-50 as disclosing a base comprising an insulating material and a frame comprising a conducting material.

The Tokumaru *et al.* ('327) reference fails to disclose or suggest a frame comprising a conductive material. Furthermore, Applicants believe that the Tokumaru *et al.* ('327) reference actually teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires the frame to be made up of a non-conductive material. Specifically, the Tokumaru *et al.* ('327) reference at column 4, lines 41-45

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states that "the material used for making the bearer 2 can be a non-conductive material which has a resistance value smaller than that of the conventional material, allowing electric charge of static electricity to diffuse" (it is understood that the 'bearer' of the Tokumaru *et al.* ('327) reference, on which the semiconductor device is mounted, is analogous to the frame of the present invention). The Tokumaru *et al.* ('327) reference at column 4, lines 46-51 further states that "The PEI material used for making the bearer 2 according to the present invention on the other hand, is selected to have a resistance value typically ranging from 10^{10} to 10^{14} ohms, resistance values that allow electric charge of static electricity to diffuse with ease while sustaining its isolating or insulating characteristic." The Tokumaru *et al.* ('327) reference at column 4, lines 52-54 states that "The resistance of the material used for making the bearer 2 is kept as a low value as possible in a range that can sustain the isolating characteristic." Applicants note that the claims of the Tokumaru *et al.* ('327) reference are consistent with its specification at column 4, lines 41-54 in that each of the claimed antistatic socket apparatuses comprise a bearer made up of a "non-conductive material." Furthermore, the abstract of the Tokumaru *et al.* ('327) reference specifies that the bearer is made of a non-conductive material. Accordingly, the Tokumaru *et al.* ('327) reference does not teach or suggest an electrostatic dissipative alignment plate comprising a base adapted to provide an interface between an integrated circuit and a plurality of electrical conductors and a frame positioned on the base and adapted to receive the integrated circuit, wherein the base comprises an insulating material and the frame comprises a conducting material. Instead, the Tokumaru *et al.* ('327) reference teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires the frame to be made up of a non-conductive material.

Regarding Claims 3-4, Applicants respectfully submit that Claims 3 and 4, being dependent from Claim 1, are patentable over the Tokumaru *et al.* ('327) reference in light of the Applicants' previous remarks regarding Claim 1.

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Accordingly, Applicants respectfully submit that Claims 1 and 3-4 are patentable over the Tokumaru *et al.* ('327) reference, and therefore request withdrawal of this rejection.

Rejection of Claims 7 and 8 under 35 U.S.C. § 103(a) over Tokumaru *et al.* ('327)

Claims 7 and 8, dependent from claim 1, are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tokumaru *et al.* ('327) reference. Applicants respectfully traverse this rejection.

Regarding Claim 7, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made "to provide Tokumaru *et al.* to have the conducting material of approximately 10^8 Ohms/sq or less and the insulating material having a resistivity of 10^{12} Ohms/sq or greater." Applicants have remarked supra that the Tokumaru *et al.* ('327) reference falls to teach or suggest an electrostatic dissipative alignment plate comprising a base adapted to provide an interface between an integrated circuit and a plurality of electrical conductors and a frame positioned on the base and adapted to receive the integrated circuit, wherein the base comprises an insulating material and the frame comprises a conducting material. Furthermore, Applicants remarked supra that the Tokumaru *et al.* ('327) reference teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires the frame to be made up of a non-conductive material. Thus, the "general conditions" of the claimed present invention are not disclosed in the prior art. Accordingly, the conducting material having a resistivity of approximately 10^6 Ohms/sq or less as recited in Claim 7 of the present invention is not an "optimum or workable range" of the prior art. Instead, the Tokumaru *et al.* ('327) reference requires that the frame comprise a non-conductive material having a resistivity between 10^{10} and 10^{14} Ohms (see column 4, lines 46-51 the Tokumaru *et al.* ('327) reference). The Tokumaru *et al.* ('327) reference teaches away from the conducting frame of the present invention,

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and thus, a resistivity of approximately 10^6 Ohms/sq or less for the conducting material as recited in Claim 7 is not an "optimum or workable" range of the prior art.

Regarding Claim 8, the Examiner states that it would have been obvious to one of ordinary skill in the art at the time the invention was made "to provide Tokumaru et al. to have the conducting material is selected from the carbon and the insulating material is selected from glass-filled thermoplastics." As Applicants have remarked supra, the Tokumaru *et al.* ('327) reference teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires that the frame be made up of a non-conductive material. As such, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to use any conducting material for the frame.

Accordingly, Applicants respectfully submit that Claims 7 and 8 are patentable over the Tokumaru *et al.* ('327) reference, and therefore request withdrawal of this rejection.

Rejection of Claims 2 and 5-6 under 35 U.S.C. § 103(a) over Tokumaru et al. ('327) in view of Hornchek et al. ('991)

Claims 2 and 5-6, dependent from claim 1, are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Tokumaru *et al.* ('327) reference in view of the Hornchek *et al.* ('991) reference. Applicants respectfully traverse this rejection.

Regarding Claim 2, the Examiner states that the Tokumaru *et al.* ('327) reference discloses the present invention except for "the base having a plurality of apertures." Applicants remarked supra that the Tokumaru *et al.* ('327) reference teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires that the frame be made up of a non-conductive material. Thus, the Tokumaru *et al.* ('327) reference fails to disclose not only a base having a plurality of apertures, but also fails to disclose a frame comprising a conducting material. The Examiner also

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states that the Hornchek *et al.* ('991) reference discloses an interface structure having a nesting portion with a plurality of through holes and that it would have been obvious to one of ordinary skill in the art at the time the present invention was made to provide the Tokumaru *et al.* ('327) reference to have the nesting portion, as taught by the Hornchek *et al.* ('991) reference, in order to secure the electrical conductors. The Tokumaru *et al.* ('327) reference is directed to an antistatic socket apparatus for semiconductor devices having electrical leads protruding from the sides of the device. For example, column 3, lines 1-6 of the Tokumaru *et al.* ('327) reference states "The antistatic socket apparatus 1 shown in FIG. 1A and 1B, allows electrical conduction to take place between leads 12 protruding out off at least two sides of a semiconductor device 1, or four sides in the case of a QFP (Quad Flat Package) type, and an external measurement circuit which is not shown in these figures." The Tokumaru *et al.* ('327) reference further states that the electrical leads of the semiconductor device protrude from at least two side surfaces of the device (see column 3, lines 12-14 of the Tokumaru *et al.* ('327) reference). It would not have been obvious to one of ordinary skill in the art at the time the present invention was made to provide the Tokumaru *et al.* ('327) reference to have the nesting portion (as taught by the Hornchek *et al.* ('991) reference) in order to secure the electrical conductors, because the electrical leads of the semiconductor device of the Tokumaru *et al.* ('327) reference protrude from the side surfaces of the device, so that there is no need for electrical conductors to come up through the base of the socket apparatus. The Tokumaru *et al.* ('327) reference teaches away from such an electrical contacting scheme in that the electrical conductors cannot come through the bearer to contact the leads of the semiconductor device (see FIG. 1A and 1B of the Tokumaru *et al.* ('327) reference). Instead, the electrical conductors must reside outside the periphery of the bearer to make contact with the device leads.

Regarding Claims 5 and 6, Applicants respectfully submit that Claims 5 and 6, being dependent from Claim 1, are patentable over the Tokumaru *et al.* ('327)

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reference in view of the Hornchek *et al.* ('991) reference in light of the Applicants' previous remarks regarding Claim 1.

Accordingly, Applicants respectfully submit that Claims 2 and 5-6 are patentable over the Tokumaru *et al.* ('327) reference in view of the Hornchek *et al.* ('991) reference, and therefore request withdrawal of this rejection.

Rejection of Claims 9-20 under 35 U.S.C. § 103(a) over Hornchek *et al.* ('991) in view of Tokumaru *et al.* ('327)

Claims 9-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Hornchek *et al.* ('991) reference in view of the Tokumaru *et al.* ('327) reference. Applicants respectfully traverse this rejection.

Independent claims 9 and 17 are directed to an electrostatic dissipative socket and an electrostatic dissipative socket assembly, respectively. Applicants wish to point out that these claims recite the feature that the base comprises an insulating material and the frame comprises a conducting material, in terms similar to claim 1.

Regarding Claims 9, 11, and 17, the Examiner states that the Hornchek *et al.* ('991) reference discloses the present invention as claimed in claims 9, 11 and 17 except for a frame comprising a conducting material. Furthermore, the Examiner states that the Tokumaru *et al.* ('327) reference discloses a bearer comprising a conducting material and that it would have been obvious to one of ordinary skill in the art at the time the present invention was made to provide the Hornchek *et al.* ('991) reference to have the bearer as taught by the Tokumaru *et al.* ('327) reference "for a better conducting."

Applicants remarked *supra* that the Tokumaru *et al.* ('327) reference teaches away from the present invention in that the Tokumaru *et al.* ('327) reference requires the frame to be made up of a non-conductive material. Thus, the present invention as claimed in Claims 9, 11, and 17 would not have been obvious to one of

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ordinary skill in the art at the time the present invention was made over the Hornchek *et al.* ('991) reference in view of the Tokumaru *et al.* ('327) reference, because both the Hornchek *et al.* ('991) reference and the Tokumaru *et al.* ('327) reference fail to disclose or suggest a frame comprising a conducting material. Applicants believe that both the Hornchek *et al.* ('991) reference and the Tokumaru *et al.* ('327) reference teach away from a frame comprising a conducting material.

The other claims pending in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

Accordingly, Applicants respectfully submit that Claims 9-20 are patentable over the Hornchek *et al.* ('991) reference in view of the Tokumaru *et al.* ('327) reference, and therefore request withdrawal of this rejection.

Conclusion

Applicants have properly traversed each ground for rejection in the Office Action mailed March 9, 2005, and therefore submit that the present application is now in condition for allowance. If the Examiner has any questions or believes further discussion will aid examination and advance prosecution of the application, a telephone call to the undersigned is invited.

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No fee is believed to be due. However, if any fees are required, please charge such fees to Deposit Account No. 09-0458.

Respectfully submitted,

Handwritten signature of Mark R. Bilak, dated 5-5-05.

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